



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

Docket No. FAA-2012-0425; Directorate Identifier 2011-NM-273-AD

RIN 2120-AA64

Airworthiness Directives; The Boeing Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (NPRM); reopening of comment period.

SUMMARY: We are revising an earlier proposed airworthiness directive (AD) for all The Boeing Company Model 717-200 airplanes. That NPRM proposed requiring repetitive inspections for cracking of the overwing frames, and corrective actions if necessary. That NPRM was prompted by multiple reports of cracks of overwing frames. This action revises that NPRM by revising the initial compliance time and providing an optional modification that would extend the compliance time for the next repetitive inspection. We are proposing this supplemental NPRM to detect and correct such cracking, which could sever a frame and increase the loading of adjacent frames, and could result in damage to the adjacent structure and consequent loss of structural integrity of the airplane. Since certain actions impose an additional burden over that proposed in the NPRM, we are reopening the comment period to allow the public the chance to comment on these proposed changes.

DATES: We must receive comments on this supplemental NPRM by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.

- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: George Garrido, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5357; fax: 562-627-5210; email: george.garrido@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-0425; Directorate Identifier 2011-NM-273-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to all The Boeing Company Model 717-200 airplanes. That NPRM published in the Federal Register on May 9, 2012 (77 FR 27142). That NPRM proposed to require repetitive inspections for cracking of the overwing frames, and corrective actions if necessary.

Actions Since Previous NPRM was Issued

Since we issued the previous NPRM (77 FR 27142, May 9, 2012), we received additional reports of overwing frame cracks on this model. The cracking occurred below the previous NPRM initial compliance time of 20,000 total flight cycles. Thus, we have determined that a shorter compliance time for the initial inspection is necessary.

Relevant Service Information

We have reviewed Boeing Alert Service Bulletin 717-53A0034, Revision 1, dated November 7, 2012; and Boeing Service Bulletin 717-53-0035, dated June 8, 2012. For information on the procedures and compliance times, see this service information at <http://www.regulations.gov> by searching for Docket No. FAA-2012-0425.

Comments

We gave the public the opportunity to comment on the previous NPRM (77 FR 27142, May 9, 2012). The following presents the comments received on the previous NPRM and the FAA's response to each comment.

Request to Extend Comment Period

Boeing requested that we revise the original NPRM (77 FR 27142, May 9, 2012) to extend the comment period for up to 90 additional days to give time to assess the information provided in the reports of Model 717 overwing frame cracks.

We do not agree with the commenter's request to extend the comment period since we are issuing this supplemental NPRM (before issuing the final rule), which automatically extends the comment period. We have not changed the AD in this regard.

Request to Delay Issuance of AD

Airtran/Southwest Airlines requested a delay in the issuance of this AD until Boeing (the original equipment manufacturer) had time to build up an adequate stock of kits and/or frames until frame replacements are required.

We disagree with the request to delay release of the AD since Boeing has advised the FAA that the required kits will be available in support of the compliance time of the AD. We have not changed this supplemental NPRM in this regard.

Request to Add Optional Overwing Frames Modification

Airtran/Southwest Airlines requested that we revise the original NPRM (77 FR 27142, May 9, 2012) to add a paragraph stating:

If Boeing Service Bulletin 717-53-0035, dated June 8, 2012 is accomplished, the inspection of overwing frame(s) for cracks can be extended to 45,000 flight cycles from the time of modification of SB 717-53-0035 and 15,000 flight cycles thereafter.

We agree with the commenter's request to add a paragraph to add the overwing frames modification as an option to the AD because the modification provides protection against cracking of the overwing frame(s). We disagree that the initial compliance time can be extended to 45,000 flight cycles, but agree that the first post-modification high frequency eddy current (HFEC) repetitive inspection may be extended to 45,000 flight cycles. We have added paragraph (h) to this supplemental NPRM to provide this option. We have also revised paragraph (g) in this supplemental NPRM to correspond to the manufacturer's recommended initial compliance time for the inspections before the accumulation of 12,000 total flight cycles, with a compliance time of 24 months or 8,275 flight cycles, whichever occurs first.

FAA's Determination

We are proposing this supplemental NPRM because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design. Certain changes described above expand the scope of the original NPRM (77 FR 27142, May 9, 2012). As a result, we have determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this supplemental NPRM.

Proposed Requirements of the Supplemental NPRM

This supplemental NPRM would require accomplishing the actions specified in the service information described previously, except as discussed under “Differences Between the Supplemental NPRM and the Service Information.”

Differences Between the Supplemental NPRM and the Service Information

Boeing Service Bulletin 717-53-0035, dated June 8, 2012, specifies to contact the manufacturer for FAA-approved repair instructions. This proposed AD would require repairing those conditions in one of the following ways:

- Using a method that we approve; or
- Using data that meet the certification basis of the airplane, and that have been approved by an Authorized Representative for the Boeing Commercial Airplanes ODA whom we have authorized to make those findings.

Where Boeing Alert Service Bulletin 717-53A0034, Revision 1, dated November 7, 2012, provides a compliance time for the initial inspection (specified in paragraph (g) of this supplemental NPRM) of before 12,000 total flight cycles or within 8,275 flight cycles after the effective date of this AD, whichever occurs later, this AD provides a compliance time of the later of either before the accumulation of 12,000 total flight cycles, or within 8,275 flight cycles or 24 months after the effective date of this AD, whichever occurs first. In developing an appropriate compliance time for this AD, we considered not only the manufacturer’s recommendation, but the degree of urgency associated with addressing the subject unsafe condition, the average utilization of the affected fleet, and the time necessary to perform the inspections. In light of all of these factors, we find a minimum compliance time of 24 months or 8,275 flight cycles after the effective date of this AD for completing the required actions to be warranted, in that it represents an appropriate interval of time for affected airplanes to continue to operate without compromising safety. This difference has been coordinated with Boeing.

Costs of Compliance

We estimate that this proposed AD affects 129 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspections	46 work-hours X \$85 per hour = \$3,910 per inspection cycle	\$0	\$3,910	\$504,390
Installation of optional modification	30 work-hours X \$85 per hour = \$2,550 per inspection cycle	Up to \$2,727	Up to \$5,277	Up to \$680,733

We estimate the following costs to do any necessary replacements/repairs that would be required based on the results of the proposed inspections. We have no way of determining the number of aircraft that might need these replacements:

On-condition costs

Action	Labor cost	Parts cost	Cost per product
Blendout repair	12 work-hours X \$85 per hour = \$1,020	\$0	\$1,020
Replacement of a frame station	130 work-hours X \$85 per hour = \$11,050	Up to \$86,977	Up to \$98,027

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs" describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: “General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

The Boeing Company: Docket No. FAA-2012-0425; Directorate Identifier 2011-NM-273-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to all The Boeing Company Model 717-200 airplanes, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 53, Fuselage.

(e) Unsafe Condition

This AD was prompted by multiple reports of cracks of overwing frames. We are issuing this AD to detect and correct such cracking that could sever a frame, which may increase the loading of adjacent frames, and result in damage to the adjacent structure and consequent loss of structural integrity of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Inspections and Corrective Actions

At the later of the times specified in paragraphs (g)(1) and (g)(2) of this AD: Do a general visual inspection and a high frequency eddy current (HFEC) inspection for cracking of the left-side and right-side overwing frames at stations 674, 696, and 715; and do all applicable corrective actions; in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 717-53A0034, Revision 1, dated November 7, 2012. Repeat the inspections thereafter at the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 717-53A0034, Revision 1, dated November 7, 2012, except as provided by paragraph (h) of this AD.

(1) Before the accumulation of 12,000 total flight cycles.

(2) Within 24 months or 8,275 flight cycles after the effective date of this AD, whichever occurs first.

(h) Optional Terminating Action

Modification of left-side and right-side overwing frames at stations 674, 696, and 715, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 717-53-0035, dated June 8, 2012, terminates the inspections required by paragraph (g) of this AD, and extends the compliance time of the modified area for the next repetitive HFEC inspection to 45,000 flight cycles after the modification, provided that the actions in paragraphs (h)(1), (h)(2), and (h)(3) of this AD are accomplished, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 717-53-0035, dated June 8, 2012. Do the inspections specified in paragraph (g) of this AD prior to, or concurrently with, the modification specified in paragraph (h) of this AD.

(1) The overwing frame improvement modification of left-side and right-side overwing frames at stations 674, 696, and 715 is installed and HFEC inspection is done within 45,000 flight cycles from the time the modification is installed, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 717-53-0035, dated June 8, 2012.

(2) If no crack is found during any inspection specified by paragraph (h)(1) of this AD, the HFEC inspections at the modified area are repeated thereafter at the applicable time specified in paragraph 1.E., “Compliance,” of Boeing Alert Service Bulletin 717-53-0035, dated June 8, 2012.

(3) If any crack is found during any inspection specified by paragraph (h)(1) of this AD, the frame is repaired or replaced using a method approved in accordance with the procedures specified in paragraph (j) of this AD, before further flight.

(i) Credit for Previous Actions

This paragraph provides credit for the actions required by paragraph (g) of this AD, if the general visual inspection and HFEC inspection for cracking of the left-side and right-side overwing frames at stations 674, 696, and 715, and the applicable related investigative and corrective actions, were performed before the effective date of this AD using Boeing Alert Service Bulletin 717-53A0034, dated October 5, 2011, which is not incorporated by reference in this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and 14 FR 25.571, Amendment 45, and the approval must specifically refer to this AD.

(k) Related Information

(1) For more information about this AD, contact George Garrido, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, CA 90712-4137; phone: 562-627-5357; fax: 562-627-5210; email: george.garrido@faa.gov.

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, CA 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; Internet <https://www.myboeingfleet.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221.

Issued in Renton, Washington, on April 26, 2013.

Ali Bahrami,
Manager,
Transport Airplane Directorate,
Aircraft Certification Service.